



# SIERRA CLUB

**Connecticut Chapter**  
**P.O. Box 270595**  
**West Hartford, Connecticut 06127**  
[connecticut.sierraclub.org](http://connecticut.sierraclub.org)

March 3, 2022

Dear Senator Needleman, Representative Arconti, Senator Winfield, Representative Allie-Brennan, Senator Formica, Representative Ferraro and members of the Energy and Technology Committee,

On behalf of the Sierra Club and our more than 40,000 members and supporters in Connecticut, thank you for the opportunity to testify on several issues before you today.

The Sierra Club is committed to defending everyone's right to a healthy world by tackling the serious challenges of a warming climate and unprecedented levels of pollution. Fossil fuels are the main driver of climate change as well as unhealthy air, and therefore our most powerful tool to address both is to create a rapid and equitable transition away from fossil fuels to clean and renewable energy across all sectors of our economy. Increasingly, storms that cripple our electric grid with greater frequency and duration, and events in the world that spike the price of fossil fuels also painfully highlight the need to move away from our dependence on fossil fuels and toward a more renewable, resilient and distributed electric grid as quickly as possible.

Though Connecticut's Global Warming Solutions Act requires a reduction of greenhouse gas emissions below 2001 levels by 45% by 2030 and 80% by 2050 in alignment with climate science, DEEP's latest greenhouse gas inventory shows that we are not on track to meet these goals.

That's why Connecticut must now focus on critically needed strategies to cut greenhouse gas emissions from the most polluting sources - buildings, transportation and electricity generation. This means passing laws that require Connecticut to achieve clear and measurable steps towards a 100% renewable electricity sector, efficient and fossil free buildings, and zero-emission transportation. We must do much, much more than has been done to date, or that is proposed thus far this session.

#### Senate Bill 176 - An Act Concerning Shared Clean Energy Facilities

Sierra Club Connecticut is one of forty organizations that are part of the Coalition for Sensible Solar Regulation, and we support the position of the Coalition on the recommended changes to the bill.

Legislators are fully aware of the inflationary pressure on electricity rates and on heating fuels like gas and oil. The rise in prices was occurring before the war in Ukraine and will only go higher. It is clear that ongoing reliance on fossil fuels to generate electricity and heat our homes continues to cause negative impacts to consumers on fixed or low incomes. Until we move more aggressively away from fossil fuels to renewable energy, consumers will continue to be ill-served by the status quo. Doubling the cap on the SCEF program to 50MW will allow more solar to be deployed quickly and to help consumers in low-to-moderate neighborhoods to take advantage of renewable electricity rates that are not as prone to spikes in prices. This is a modest start, but it is not enough by itself.

***Phone: (860) 578-4750 -- Email: [Connecticut.chapter@sierraclub.org](mailto:Connecticut.chapter@sierraclub.org)***

The Energy & Technology Committee is also sensitive to the need for businesses in our state to stay competitive. There is a backlog of demand for businesses to build out more non-residential solar on their properties than is currently authorized. As such, we support the coalition position that the size of the Non-Residential Renewable Energy Tariff (NRES) program be doubled from 50 to 100 MW per year. This will allow more solar to be built, helping businesses keep their electricity costs down while also helping Connecticut achieve higher rates of renewable energy generation. In the future, it would be preferable to not have to come back to the legislature every year to revisit the caps, but rather remove them in 2023, and allow PURA to determine what expansion can be appropriately accommodated.

In addition, we would like to see businesses be able to build out solar on their buildings to the full size of their rooftop as well as add solar to canopies in their parking lots. We support this common-sense approach to utilize rooftops and parking areas more fully for solar thereby minimizing the need to utilize natural spaces like farmland. We urge the committee to consider an NRES program adder of 6 cents per kWh for solar canopies, enabling the benefits of this valuable deployment option.

We do not support EDCs owning SCEF facilities at this time, but do support the Coalition's recommended approach involving PURA review.

Connecticut is not only not meeting its own goals for reduction in greenhouse gas emissions, it is falling behind all of its neighboring states in deployment of solar energy. Currently Connecticut is getting 2.45% of its electricity from solar whereas Rhode Island is getting 7.8% and Massachusetts is getting 18.5%. Both states belong to ISO-NE and Massachusetts has Eversource retail electric rates comparable to Connecticut; Rhode Island is less expensive. We are in a climate emergency. What we do to mitigate it now matters even more than what we do later. We need to catch up and pass our peers in New England.

House Bill 5200 An Act Establishing A Task Force to Study Hydrogen Power

Sierra Club Connecticut opposes House Bill 5200, An Act Establishing a Task Force to Study Hydrogen Power. As written this bill creates a task force to develop plans to launch the production of hydrogen derived from any source, which will result in more dirty polluting energy generation in Connecticut. The underlying presumption of the creation of the task force is that Connecticut should develop and incentivize hydrogen.

As outlined in Sierra Club's recent report "Hydrogen: Future of Clean Energy or a False Solution?"<sup>1</sup> the fossil fuel industry is hyping hydrogen of all kinds as a low-carbon replacement for all sorts of uses—from powering vehicles and heavy industry to heating buildings. In reality, many hydrogen projects will only lock us in to continued fossil fuel use and additional investments in fossil fuel infrastructure. Currently, more than 99 percent of the United States's annual supply of hydrogen, about 10 million metric tons, comes almost entirely from fossil fuels through "steam methane

---

<sup>1</sup> <https://www.sierraclub.org/articles/2022/01/hydrogen-future-clean-energy-or-false-solution>

reforming” (SMR), an energy-intensive process in which methane gas is broken down into hydrogen and carbon dioxide. Hydrogen produced through SMR is a high-emissions product given the name “gray hydrogen.”

The Sierra Club only supports the use of green hydrogen—hydrogen made through electrolysis that is powered by renewable energy. However, in Connecticut, there is limited-to-no potential at the moment for green hydrogen because it requires a huge surplus of renewable energy, which we don’t have. Globally only 0.02 percent of current hydrogen production is green. As we build out additional clean energy it should be used for direct electricity to power our daily lives, our homes, our businesses, and our cars. Using new renewables directly is much more efficient than converting them into hydrogen for use.

Additionally Sierra Club requires other conditions must be met for green hydrogen to be a good idea: 1) green hydrogen is a promising solution only for uses that cannot otherwise directly rely on clean electricity, which is much more efficient; 2) green hydrogen should not be used to justify a buildout of facilities that otherwise increase pollution or fossil fuel use; 3) if green hydrogen is being used, the goal should be to switch to 100 percent green hydrogen once the technology is available. We should not support projects that label themselves as “sustainable” because their fuel source includes a small fraction of hydrogen when the lion’s share of it is fracked gas.

Sierra Club urges the Committee to reject House Bill 5200 and focus on rapid deployment of clean and renewable energy, i.e. solar, wind, and battery storage to achieve our clean energy goals and meet our greenhouse gas reduction targets under the Global Warming Solutions Act.

House Bill 5202 An Act Exempting Existing Nuclear Power Generating Facilities in the State from the Nuclear Power Facility Construction Moratorium

Sierra Club opposes House Bill 5202, An Act Exempting Existing Nuclear Power Generating Facilities in the State from the Nuclear Power Facility Construction Moratorium. Sierra Club’s longstanding policy on nuclear power, developed in 1974 and expanded upon in 1979 after events at Three Mile Island Nuclear Plant, and again in 2016. Sierra Club opposes the licensing, construction and operation of new nuclear reactors utilizing the fission process, pending 1) resolution of the significant safety problems inherent in reactor operation, disposal of spent fuels, and possible diversion of nuclear materials capable of use in weapons manufacture, and 2) establishment of adequate regulatory machinery to guarantee adherence to the foregoing conditions. Instead, Sierra Club supports the systematic reduction of society’s dependence on nuclear fission as a source of electric power and recommends a phased closure and decommissioning of operating commercial nuclear fission electric power reactors.

**Connecticut Chapter**  
**P.O. Box 270595**  
**West Hartford, Connecticut 06127**  
connecticut.sierraclub.org

Besides reactor safety, both nuclear proliferation and the required long-term storage of nuclear waste (which remains lethal for more than 100,000 years) make nuclear power a uniquely dangerous energy technology for humanity.

The current Connecticut statute, recognizing the danger of high level nuclear waste, proactively prevents the construction of more nuclear power plants. This bill would change that.

In addition to those concerns, Marc Jacobson's 2019 research "Evaluation of Nuclear Power as a Proposed Solution to Global Warming, Air Pollution, and Energy Security"<sup>2</sup> found that a fixed amount of money spent on a new nuclear plant means much less power generation, a much longer wait for power, and a much greater emission rate than the same money spent on wind, water, and solar technologies. Specifically, new nuclear power plants cost 2.3 to 7.4 times those of onshore wind or utility solar PV per kWh, take 5 to 17 years longer between planning and operation, and produce 9 to 37 times the emissions per kWh as wind.

Nuclear is no solution to climate change and every dollar spent on nuclear is one less dollar spent on truly safe, affordable and renewable energy sources. For these reasons, we urge the Committee to reject House Bill 5202 and focus on rapid deployment of clean and renewable energy, i.e. solar, wind, and battery storage to achieve our clean energy goals and meet our greenhouse gas reduction targets under the Global Warming Solutions Act.

Thank you for consideration of our testimony.

Sincerely,

Samantha Dynowski, State Director  
Sierra Club Connecticut

---

<sup>2</sup> <https://web.stanford.edu/group/efmh/jacobson/Articles/I/NuclearVsWWS.pdf>